

CLAIMS:

1. A recordable optical record carrier comprising a recording dye layer (111, 211), whereby said recording dye layer (111, 211) comprises at least two organic dye materials being absorptive at different wavelengths.
- 5 2. A record carrier according to claim 1, characterized in that said at least two organic dye materials are mixed within one layer thereby providing a compound material with at least two absorption flanks.
- 10 3. A record carrier according to claim 1, characterized in that said recording dye layer comprises at least two recording sub-layers each comprising one of said at least two organic dye materials, respectively.
- 15 4. A record carrier according to claim 1, characterized in that a pre-groove is provided for tracking purposes comprising at least two sub-grooves having different widths.
5. A record carrier according to claim 1, characterized in that a pre-groove is provided for tracking purposes comprising at least two consecutive sections each having different widths.
- 20 6. A record carrier according to claim 5, characterized in that said at least one of said at least two consecutive sections comprises at least two sub-grooves having different widths.
- 25 7. A method for writing data on a segment of a multi-color recordable disc, wherein marks representing the data are written via a writing laser beam at a first predetermined wavelength, whereby said marks are written according to a writing strategy providing a channel bit length and a mark width appropriate for read-out by a beam of electromagnetic radiation at a second predetermined wavelength being different from said first predetermined wavelength.

8. A method according to claim 7, whereby said first predetermined wavelength is shorter than said second predetermined wavelength and said writing strategy utilizes a pulsed laser beam applying an increased number of laser pulses compared to the number of 5 laser pulses appropriate for writing marks at said first predetermined wavelength.

9. A method according to claim 7, whereby said first predetermined wavelength is shorter than said second predetermined wavelength and said writing strategy utilizes a pulsed laser beam applying beam pulses with extended pulse duration compared to the pulse 10 duration appropriate for writing marks at said first predetermined wavelength.

10. A method according to anyone of claims 7 to 9, whereby said first predetermined wavelength is shorter than said second predetermined wavelength and said writing strategy utilizes a pulsed laser beam applying laser beam pulses of increased laser 15 power compared to the laser power for writing marks at said first predetermined wavelength.

11. A method according to claim 10, whereby said pulsed laser beam is defocused with respect to an addressed recording layer of said multi-color recordable disc.

20 12. A method according to claim 7, whereby said first predetermined wavelength is longer than said second predetermined wavelength and said writing strategy utilizes a pulsed laser beam applying a decreased number of laser pulses compared to the number of laser pulses appropriate for writing marks at said first predetermined wavelength.

25 13. A method according to claim 7, whereby said first predetermined wavelength is longer than said second predetermined wavelength and said writing strategy utilizes a pulsed laser beam applying beam pulses with shorter pulse duration compared to the pulse duration appropriate for writing marks at said first predetermined wavelength and whereby said marks are shrunk after writing.

30 14. A method according to anyone of claims 7, 12, or 13, whereby said first predetermined wavelength is longer than said second predetermined wavelength and said writing strategy utilizes a pulsed laser beam applying laser beam pulses of decreased laser

power compared to the laser power appropriate for writing marks at said first predetermined wavelength.

15. A method according to claim 7, whereby information representative for said writing strategy is stored in an identification block preceding said segment.

16. A method according to claim 7, whereby information representative for said channel bit length is stored in said identification block preceding said segment.

10 17. A method according to claim 7, whereby information representative for a reflection level is stored in said identification block preceding said segment.